

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/ Aggr -T- 9683, 9684 /Lab/ **151** /2020-21

Dated: 05/ 12 / 2020.

Laboratory: Bicholim

Sand –T: 5055,5056,5057 , Cement: 1196. Lat:T:0439

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub: Construction of protection wall for nallah on both side from main road to Sagun Sinari House and Govind parab house to Shekri at Pimpalwada, Amona in Bicholim Taluka.

Ref to requisition No: SDI/WDVI/WRD/F.W. 226/2020-21/348 Dated: 25/11/2020.

Qty. Received: 1 bags of **Date of Receipt:** 28/11/2020 **Tested on:** 30/11/2020, 01,02 & 03/12/2020 **Ref to Specification:** CPWD 2009, Vol. I & IS:4031-4-1968

Sample: Sand ,20mm, **O.S. No.** 4302,4303,4307,4316,4325,4308 & 4301 /SS **Lab. Sample No.:** 9584 To 9590 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.
12.5mm size aggrt, & 1 bags cement.

R E P O R T 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks		
1.	<u>20 mm Size Aggregate:</u>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size. (Qty. rep. – --- m ³)				
2.	<u>12.5 mm Size Aggregate:</u>	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size. (Qty. rep. – --- _m ³)				
<u>REMARK:</u> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <u>1:2</u> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.							
3.	<u>Course Sand:</u> (L.S.No.9586)	i) Silt & Clay by S.A. method : - ii) Silt by sedimentation : - iii) Fineness Modulus : - iv) Grading Zone : -	4.80% 5.20% 2.60 II	4.	<u>Fine Sand:</u> (L.S.No.9587)	i) Silt & Clay by S.A. method : - ii) Silt by sedimentation : - iii) Fineness Modulus : - iv) Grading Zone : -	4.20% 4.65% 1.96 IV
<u>REMARK:</u> The observed results are within the permissible limits of the coarse and Fine sand.							
5.	<u>Crushed Sand:</u> (L.S.No.9588)	i) Silt & Clay by S.A. method : - ii) Silt by sedimentation : - iii) Fineness Modulus : - iv) Grading Zone : -	12.20% 14.77% 3.172 I	(Limit of Deleterious material is 15.00% for crushed sand)			
<u>REMARK:</u> The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1).							

Junior Engineer

Assistant Engineer

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/ Aggr -T- 9683, 9684 /Lab/ **151** /2020-21

Dated: 05/ 12 / 2020.

Laboratory: Bicholim

Sand –T: 5055,5056,5057 , Cement: 1196. Lat:T:0439

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub: Construction of protection wall for nallah on both side from main road to Sagun Sinari House and Govind parab house to Shekri at Pimpalwada, Amona in Bicholim Taluka.

Ref to requisition No: SDI/WDVI/WRD/F.W. 226/2020-21/348 Dated: 25/11/2020.

Qty. Received: 1 bags of **Date of Receipt:** 28/11/2020 **Tested on:** 30/11/2020, 01,02 & 03/12/2020 **Ref to Specification:** CPWD 2009, Vol. I & IS:4031-4-1968

Sample: Sand ,20mm, **O.S. No.** 4302,4303,4307,4316,4325,4308 & 4301 /SS **Lab. Sample No.:** 9584 To 9590 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.
12.5mm size aggrt, & 1 bags cement.

R E P O R T 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
6.	Laterite stone	A) Compressive strength test: -	i) 25.81 Kg /cm ² ii) 33.33 Kg /cm ² iii) 30.10 Kg /cm ² Avg. 29.74 Kg/cm ²	35.00kg/cm²	Remark: - The average Compressive strength achieved is 15.02 % more than the specified value of 35 Kg/cm² .
		B) Water Absorption Test.	i) 10.00 % ii) 11.50 % iii) 11.00 % Avg. 10.83 %	12.00 %	Remark: The average water absorption is 10.83 % , which is less than the maximum permissible limit of 12% .
7.	Cement: Jyoti cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week __, Month __, Year'2020. CM/L = ----- Qty. rep. – _____.		i) Fineness of Cement : 1.37 % ii) Consistency of cement : 32.00% iii) Initial Setting Time : 165 minutes iv) Final Setting Time : 310 minutes	----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes)	
To be used for – ----- REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

Copy to: 1. The Assistant Engineer, SDI, WDVI,WRD, Bicholim – Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa.
4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer